

OPEN PEER REVIEW REPORT 1

Name of journal: Neural Regeneration Research

Manuscript NO: NRR-D-18-00791

Title: Induced pluripotent stem cells from Huntington's disease patients:

a promising approach to define and correct disease-related alterations

Reviewer's Name: Elizabeth Hernández-Echeagaray

Reviewer's country: Mexico **Date sent for review:** 2018-11-13

Date reviewed: 2018-11-14

Review time: 1 day

COMMENTS TO AUTHORS

The reviewed presented by Azra et al., is interesting in terms of the study of human diseases and drug screening, for regenerative medicine and in particular for HD. However I have two comments to the authors:

First; as a review it should be better to cite original references for page 2 instead of claiming 3 times in the same paragraph another review made by Finkbeiner S (2011) Huntington's Disease. Cold Spring Harb Perspect Biol 3.

Second; the end of the review ends abruptly, please revise your conclusion to make a smoother conclusion instead of jumping to "Prompted by these results, we silenced the expression of ATF7IP in HD-iPSCs and find a decrease in H3K9me3 in these cells. Most importantly, loss of ATF7IP at the iPSC stage allows for the generation of neural cells with rescued levels of genes involved in neuronal function which are normally diminished in HD. Thus, by using iPSCs we identified ATF7IP as a potential target to correct aberrant epigenetic marks and gene expression induced by mutant HTT. It will be fascinating to follow new advances in the study of HD-iPSCs and their differentiated counterparts, which can help to define interventions for HD".